

Notice of Allowability

Application No.

10/680,610

Examiner

LOHA BEN

Applicant(s)

LEIGH TRAVIS, ADRIAN ROBERT

Art Unit

2873

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address--

All claims being allowable, PROSECUTION ON THE MERITS IS (OR REMAINS) CLOSED in this application. If not included herewith (or previously mailed), a Notice of Allowance (PTOL-85) or other appropriate communication will be mailed in due course. **THIS NOTICE OF ALLOWABILITY IS NOT A GRANT OF PATENT RIGHTS.** This application is subject to withdrawal from issue at the initiative of the Office or upon petition by the applicant. See 37 CFR 1.313 and MPEP 1308.

1. ☒ This communication is responsive to Applicants' application dated October 7, 2003.
2. ☒ The allowed claim(s) is/are 1-8.
3. ☒ The drawings filed on 07 October 2003 are accepted by the Examiner.
4. ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
 - a) ☐ All b) ☐ Some* c) ☒ None of the:
 1. ☒ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this national stage application from the International Bureau (PCT Rule 17.2(a)).

* Certified copies not received: _____.

Applicant has THREE MONTHS FROM THE "MAILING DATE" of this communication to file a reply complying with the requirements noted below. Failure to timely comply will result in ABANDONMENT of this application.

THIS THREE-MONTH PERIOD IS NOT EXTENDABLE.

5. ☐ A SUBSTITUTE OATH OR DECLARATION must be submitted. Note the attached EXAMINER'S AMENDMENT or NOTICE OF INFORMAL PATENT APPLICATION (PTO-152) which gives reason(s) why the oath or declaration is deficient.
6. ☐ CORRECTED DRAWINGS (as "replacement sheets") must be submitted.
 - (a) ☐ including changes required by the Notice of Draftsperson's Patent Drawing Review (PTO-948) attached
 - 1) ☐ hereto or 2) ☐ to Paper No./Mail Date _____.
 - (b) ☐ including changes required by the attached Examiner's Amendment / Comment or in the Office action of Paper No./Mail Date _____.

Identifying indicia such as the application number (see 37 CFR 1.84(c)) should be written on the drawings in the front (not the back) of each sheet. Replacement sheet(s) should be labeled as such in the header according to 37 CFR 1.121(d).
7. ☐ DEPOSIT OF and/or INFORMATION about the deposit of BIOLOGICAL MATERIAL must be submitted. Note the attached Examiner's comment regarding REQUIREMENT FOR THE DEPOSIT OF BIOLOGICAL MATERIAL.

Attachment(s)

1. ☒ Notice of References Cited (PTO-892)
2. ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3. ☒ Information Disclosure Statements (PTO-1449 or PTO/SB/08),
Paper No./Mail Date 0604; 1003
4. ☐ Examiner's Comment Regarding Requirement for Deposit
of Biological Material
5. ☐ Notice of Informal Patent Application (PTO-152)
6. ☐ Interview Summary (PTO-413),
Paper No./Mail Date _____
7. ☒ Examiner's Amendment/Comment
8. ☒ Examiner's Statement of Reasons for Allowance
9. ☐ Other _____


Loha Ben
Primary Examiner

EXAMINER'S AMENDMENT

An examiner's amendment to the record appears below. Should the changes and/or additions be unacceptable to applicant, an amendment may be filed as provided by 37 CFR 1.312. To ensure consideration of such an amendment, it MUST be submitted no later than the payment of the issue fee.

The application has been amended as follows:

In the Claims

Claims 1, 3, 4 and 6 have been amended as follows to correct obvious matter:

1. (Currently Amended) A flat-panel projection display comprising a transparent slab element and corresponding area grating, a transparent rod element with rectangular cross-section and corresponding linear grating, arranged along ~~[[the]]~~ an edge of the slab element, and a small projector, in which the projector is arranged to direct ~~[[the]]~~ an image into ~~[[the]]~~ an input end of the rod element, the linear grating is adapted to divert ~~[[it]]~~ the image into the plane of the slab element, and the area grating is adapted to project ~~[[it]]~~ the image out of the slab element towards a viewer.

3. (Currently Amended) A flat-panel projection display according to claim 1, in which at least one of the gratings is embossed on the surface of the rod element or the slab element.

4. (Currently Amended) A flat-panel projection display according to claim 1, in which at least one of the gratings, preferably that on the slab element, is holographic.

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6. (Currently Amended) A flat-panel projection display according to claim 1, further including mirrors arranged at the input end of the rod element and parallel to its axis, so as to direct substantially the entire output of the projector into the rod element.

REASONS FOR ALLOWANCE

The following is an examiner's statement of reasons for allowance: Best reference noted is Tai et al. Despite similarity of Tai et al device with that of the present invention, where both the former and the latter comprise each a rod element and a slab element. However, the former calls for **micropisms** to direct light from the rod element to the slab element, and from the slab element to a viewer, whereas that of the present invention is interested in using **a linear grating** on the rod element to direct an image from a projector into the plane of the slab element, and using **an area grating** on the slab element to direct the image out of the slab element towards a viewer.

The difference between the two inventions is that the former is a light expanding system in displays, road signs, for example, or used to light pictures or art work, and no image projection involved, whereas the latter is for far-field imaging system.

Therefore, in view of the foregoing, it is concluded that the present invention distinguishes over that of Tai et al.

Any comments considered necessary by applicant must be submitted no later than the payment of the issue fee and, to avoid processing delays, should preferably

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accompany the issue fee. Such submissions should be clearly labeled "Comments on Statement of Reasons for Allowance."

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Loha Ben whose telephone number is (571) 272-2323. The examiner can normally be reached on Monday to Saturday, generally between 12:00 noon and 8:00 p.m.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Georgia Y. Epps, can be reached on Monday to Friday, at (571) 272-2328. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

August 30, 2004



Loha Ben
Primary Examiner